

The influence of poverty on children's school experiences: pupils' perspectives

Lynn Naven^{a*}, Edward M. Sosu^b, Sara Spencer^c and James Egan^a

^aGlasgow Centre for Population Health, Glasgow, Scotland

^bSchool of Education, University of Strathclyde, Glasgow, Scotland

^cChild Poverty Action Group, Glasgow, Scotland

Provide full correspondence details here including e-mail for the *corresponding author

Lynn Naven, Glasgow Centre for Population Health, Glasgow, Scotland. E-mail:

Lynn.Naven@glasgow.ac.uk

Biography

Lynn Naven is a public health research specialist at the Glasgow Centre for Population Health. ORCID ID: [0000-0002-2017-7562](https://orcid.org/0000-0002-2017-7562)

Edward M. Sosu is a senior lecturer in the School of Education at the University of Strathclyde. ORCID ID: 0000-0002-7026-8470

Sara Spencer is the Cost of the School Day Project Manager at the Child Poverty Action Group in Scotland.

James Egan is a public health programme manager at the Glasgow Centre for Population Health

Acknowledgement and Dedication

We would like to acknowledge the help and support of staff in the schools involved in this study and thank the pupils who participated in workshop sessions and shared their views and experiences with the project staff.

We dedicate this paper to the memory of Marion Fairweather, who worked on the Cost of the School Day (CoSD) Project with the Child Poverty Action Group, and provided valuable insights, advice and relevant data on the project to inform this publication.

Abstract

This study examined the potential influence of policies and practices on the ability of children from low-income families to participate fully in the school day. Pupils from six schools participated in 71 focus groups and revealed a range of barriers affecting their school experience: transport costs and limited support; clothing costs, stigma and enforcement of school dress codes; material barriers to learning at school and home; concerns about free school meals; missing out on school trips, clubs and events.

Findings on school uniform were an important catalyst towards a recent policy change in Scotland in increasing the school clothing grant.

Keywords: poverty; attainment; barriers; children; school experiences;

Introduction

Family background is an important predictor of academic success, and a large body of evidence indicates that poverty has a direct and negative effect on children's educational outcomes (Blanden and Gregg, 2004; Cooper and Stewart, 2013; Dickerson and Popli, 2016; OECD, 2016). For instance, children living in poverty are likely to have impaired working memory, short attention spans, high levels of distractibility, difficulty monitoring the quality of their work, and difficulty generating new solutions to problems, making school harder for them (Evans and Schamberg, 2009). Conversely, increases in family income have been associated with gains in cognitive achievement (Cooper and Stewart, 2013; Cooper and Stewart, 2017). While the evidence suggests a causal relationship between household income and children's educational outcomes, our understanding of the mechanisms by which poverty leads to poorer outcomes is not well understood.

Two key theories are generally used to explain the poverty-attainment gap. According to the Resource and Investment theory, children living in poverty fall behind more economically advantaged peers because poorer parents have fewer resources to invest in goods and services that directly or indirectly contribute to child development (Conger et al, 2010; Mayer, 1997). Parents on low income lack the resources to provide access to stimulating home learning environments, such as books that help children to familiarise with the words teachers use in class or the words that appear in reading materials (Connelly et al, 2014; Jensen, 2013). Resources also determine the ability of children to participate in extracurricular activities (Wikeley et al, 2007), and afford day-to-day essentials, such as school uniform that can affect feelings of belongingness (Jensen, 2013; Ridge, 2002). Poor or damp housing, and nutritional deficiencies associated with poverty directly affect key mediators such as children's health and brain development (Basch, 2011; Gottlieb et al, 1995;

Reading, 1997; Taki et al, 2010). Indeed, children living in poverty are more likely to experience other health problems such as chronic disease, mental health problems and increased risk of unintentional injuries and accidents associated with wider environmental risk, all of which interfere with school attendance and educational outcomes (Benzeval, 2014; NHS Health Scotland, 2018)

The Family and Environmental Stress theory on the other hand argues that money affects children's cognitive outcomes through high levels of parental stress. Parents on low income experience significant stressors and negative impacts on mental health arising from the struggle to pay for day-to-day essentials. (Butterworth et al, 2012; Duncan and Brooks-Gunn, 1997; Mortimore and Whitty, 2000). Poor parental mental health in turn leads parents to use harsher disciplines and less positive comments, which negatively affects children's behavioural and cognitive outcomes (Risley and Hart, 2006; Sosu and Schmidt, 2017). Children living in poverty themselves experience greater chronic stress which affects brain development, social competence and academic success (Evans et al, 2007). This stress in families, caused by poverty, is thought to result in children spending a part of their day worrying instead of learning or playing, leading to "a little part of their childhood being taken away" (Royal College of Paediatrics and Child Health, 2017).

Existing theories suggest that poverty affects children's cognitive outcomes mainly through parental behaviours. Despite the fact that children spend a large proportion of their time with teachers and peers at school, very few studies have explored the mediating role of the school environment on the educational experiences of children from low-income households. A recent review of evidence suggests that a positive school climate can mitigate the association between poverty and poor academic achievement but point to significant gaps

in the quantity and quality of research (Berkowitz et al, 2017). It has been argued that schools are modelled on particular norms within society and those norms can either help children to succeed in the face of economic adversity or lead to further disadvantages (Reay, 2006). For instance, evidence suggests that teachers' decisions and behaviours about children's ability are influenced by children's socioeconomic background, and this can lead to self-fulfilling prophecies of low educational outcomes (McGillicuddy and Devine, 2018; Francis et al, 2017). Theories of social exclusion (Levitas et al, 2007) also suggest that decisions taken by schools can significantly affect the ability of children from low-income households to fully participate in school life. Crucially, research on children's own perspectives about how poverty influences their participation and school experiences is sparse (Berkowitz et al, 2017). Privileging children's own voices is likely to give insight into the nuanced ways in which poverty affects educational outcomes, a perspective that might not be visible to adults within the school or home environment. It has been suggested that children's reports of their own experiences very often differ from adults' perceptions of child experiences (Casas, 2011). The current study aimed to fill this research gap by exploring children's experiences of the school day and their perceptions of how poverty influences these experiences.

Context of the study: poverty and educational attainment in Scotland

Similar to the rest of the United Kingdom, recent data on child poverty in Scotland indicates one in four children (26%) were living in relative poverty (Scottish Government, 2017a). Child poverty rates had been falling for many years but started to rise following the effects of the 2008 economic crises and the UK government policy decisions around welfare reforms, cuts to public spending, as well as stagnating wages (Scottish Government, 2015a; Scottish Government, 2017a). Within Scotland, the local authority where this study was located has

one of the highest rates of child poverty in the UK, with over 34% of children living in poverty (End Child Poverty Coalition, 2016).

There is clear evidence in Scotland that poverty significantly influences children's educational outcomes with students from the richest households consistently outperforming those from poorer backgrounds (Scottish Government, 2014; Scottish Government, 2015b; OECD, 2016; Sosu and Ellis, 2014). Recent Scottish Government policy and investment has focused on closing this poverty-related attainment gap. For instance, the National Improvement Framework for Scottish education (Scottish Government, 2017c) provides a vision for closing the gap through actions such as improved school leadership, teachers' professional development, increased parental engagement, and use of assessment and other data to monitor and guide school decision-making. Other policies include the provision of free school meals (FSM) being extended to all primary 1 to primary 3 children in Scotland from 2015 onwards, to ensure that every child has one hot meal each day and to minimise stigma around claiming meals (Scottish Government, 2017b). The Scottish Attainment Challenge launched in 2015 committed £750m, some of which is directly given to schools to improve the educational achievement of pupils from low-income households.

While schools are increasingly being expected to address the attainment gap through curriculum-based and pedagogical measures, there is limited understanding of the underlying poverty-related mechanisms involved in educational attainment for the most disadvantaged pupils (Scottish Government, 2017c). More specifically, little attention has been devoted to understanding and addressing school-related factors that might serve as a barrier to attainment for children from low-income backgrounds. Even more scarce is research focused on understanding these relationships from children's own perspective. It is this gap that the

current research aimed to fill. The current study was therefore aimed at answering the following research question:

- How do school policies and practices affect the experiences and participation of pupils from low-income households?

Methodology

The Cost of the School Day project

The current study was part of a larger study, the Cost of the School Day project, initiated by a Glasgow City Council-led collaboration to tackle poverty-related issues in education (Poverty Leadership Panel, nd)). More specifically, it was aimed at exploring: a) how school practices and education policies impact on the participation and school experiences of pupils from low-income households, and b) how school practices and education policies can be designed to reduce or remove stigma, exclusion or disadvantage for pupils from low-income households, and by doing so remove barriers to learning (Spencer, 2015).

Research Design

A participatory action research approach was adapted and used for the study (Baum et al, 2006). With this approach, knowledge is developed through partnerships between researchers and people affected by and/or responsible for action on the issues under study (Jagosh et al, 2012). In this way, participatory action research can allow school and classroom practices to be understood from different perspectives, not least those of the children themselves, and can encourage stakeholders to investigate their own situations and practices with a view to bringing about improvements (University of Manchester, nd). Participatory research has been utilised in educational and home settings to provide insights into young people's perceptions and experiences of poverty and wellbeing (Ridge, 2002; Horgan, 2007; Sutton et al, 2007;

Main and Mahony, 2018). This project was participatory in that its conceptualisation and focus was undertaken in collaboration with stakeholders in education, the local authority, charities, and public health. Additionally, pupils were engaged in workshop discussions and participatory exercises to:

- (a) understand the ways in which school ‘does things’ from a child’s perspective, that is, its policies and practices on key areas,
- (b) learn how pupils think a child from a low-income family would experience the day in their school, identifying problems and the impact they would have, and
- (c) identify the main poverty-related problems throughout the school day which require attention from the school or local authority.

The action element of the study entailed engaging the participants to highlight things they thought should be improved and developing policy guidance for the local authority and participating schools, highlighting actions that should be taken to ‘poverty-proof’ the school day. Brief details of some of the actions taken, as a result of the recommendations from the study, are highlighted in the discussion.

Study Sample and Ethics

Participants were drawn from six schools (4 primaries and 2 secondaries), chosen on the basis of geographic spread and varying levels of deprivation, using the Scottish Index of Multiple Deprivation (SIMD). This was a convenience sample of schools recruited with the support of Glasgow City Council Education Services. Each SIMD quintile contains 20% of Scotland’s datazones, with SIMD quintile 1 being the most deprived datazone and SIMD quintile 5, the least deprived. Two schools were located in quintile 1, two in quintile 2, one in quintile 4 and one in quintile 5.

Pupils were informed about the project either by the project manager in school assemblies and classes, or by staff. Participants then either volunteered to take part or were selected by staff. In both cases, the project was explained again to children at the start of sessions to support informed consent and allow them to withdraw if they wished. Consent was sought from parents/carers of those aged under 16 years, and those over 16 years were offered the opportunity to opt in to the workshop sessions. Throughout the data collection period, assent was continuously sought, and pupils were reminded of their ability to withdraw at any point. Primary school children ranged in ages from 8 years (P5) to 12 years (P7) and secondary school pupils included children from S1 to S6 (12-18 years).

Data Collection

In order to engage the pupils, data were collected using focus group discussions with the aid of a vignette of a fictional character called Ross from a low-income household who was about to start at their school. Ross's story centred on a family whose mother had lost her paid job, which led to a drop in family income. The vignette was used to offer a safe degree of personal distance, which encouraged pupils to explore potentially sensitive topics, and captured experiences throughout the entire day that could impact on Ross's school life. Pupils were invited to imagine what Ross's school day would be like, based on his story. Topics included dressing for school, eating breakfast, travelling to school, learning and eating at school, school trips, clubs and fun events, travelling home, and after-school learning. Children were then invited to talk about any of the school-related topics and identify where they thought costs may arise throughout the day. Details of the vignette and other participatory tools and approaches used in the sessions are available in the project report (Spencer, 2015).

The focus group discussions, termed ‘workshop sessions’, aimed to empower pupils to go beyond simple descriptions of their experiences to suggest solutions. Each workshop session comprised between 8 and 12 participants, mixed according to gender and free school meal entitlement. All groups took part in two workshop sessions. The purpose of the first workshops were to explore the costs involved in attending school while the second workshops focussed on developing solutions in terms of looking at what schools were already doing and what more could be done. Multiple workshops were undertaken during school hours in each school, resulting in a total of 71 workshop sessions with 282 pupils across all schools, between September and December 2014. School staff were not present at the workshop sessions.

Data analysis

Data were captured from each session in the form of recordings and/or field notes. All data were transcribed and then analysed using the QSR NVivo qualitative data analysis software package. As the children’s workshop sessions were directed by prompts based on the fictional character scenario, using mediums of journaling, role-play and props (Gibson, 2012), a deductive thematic analysis based on these prompts was used. Themes were arrived at after several discussions between the researchers and project team.

Findings

Five themes clustered around: transport cost and limited support entitlement; school clothing cost, stigma and enforcement; cost barriers to learning at school and home; concerns about free school meals; and, missing out on school trips, clubs and events.

Transport cost and limited support entitlement

Findings on transport to and from school centred around the cost of transport, entitlement to free school travel, and transport-related barriers to participation in school events. Children of all ages noted that transport costs could be an issue for the fictional character, Ross. This theme was, however, more prominent among secondary school children who were more likely to independently travel to school. Pupils not in receipt of free school transport reported weekly costs ranging from between 6 and 10 British pounds (£) for those aged 16 and under, and between £12 and £16 pounds for those over sixteen, depending on whether it was a daily or weekly ticket. Although there is entitlement to free school travel nationally, it is based on distance from school. Travel passes are provided for primary school children living just over two miles (3.2 kilometres), and secondary school pupils living over three miles (4.8 kilometres) from their school's catchment area. Some pupils highlighted the unfair and arbitrary nature of these boundary lines, which ignored different levels of family income or need among families.

“My friend lives like here [points], and I've actually counted the steps [between her house and mine]. She has a bus pass and I don't. We have to pay for two people to get the bus”.
(S3-4).

In some schools, children living outside the school's catchment area noted that they have to walk for up to 45 minutes to school and back each day, or, arrange other means of transport such as private car or paying for public transport. Pupils noted that some children did not attend school if their parents could not afford public transport costs. For those in receipt of free transport, the strict rules associated with it were cited as a barrier to participating in after school clubs and activities, since the bus pass can only be used until

5pm.

“We go to football matches with the school as well and they don't get back ‘til 8 o'clock so maybe they should extend it” [the bus pass] (S1).

Similar barriers were highlighted with regard to ability to take part in supported study after school. One school runs Easter revision classes, which poses problems for low-income families, who could potentially benefit the most, but who have no recourse to free public transport during school holidays.

School clothing cost, stigma and enforcement

The main findings in relation to school clothing were costs, associated stigma surrounding lack of acceptable uniform, and enforcement of school dress codes.

Cost and stigma: School uniform and accessories, particularly shoes, bags and jackets, emerged as significant costs for low-income families. Pupils of all ages described its symbolic importance as the main indicator of family income. Most schools permit the purchase of generic clothing items in the school colours from supermarkets and low-cost stores, but differences in brands are noticed, even at primary school level, and children recognise the distinction between low cost and expensive clothing and accessories, which can result in stigmatisation:

“There's a set uniform, but you can still tell like who's richer and poorer by like the jackets, the shoes, the bags” (S3-4).

Primary school children thought that the fictional character, Ross, would feel embarrassed if he could only afford low-cost school clothing, or had to wear older clothing, and would fear being bullied. Some spoke of the difficulties involved in not being able to afford uniform items:

“...it's really hard for my mum and she only had enough money to pay for one of my brothers' jackets so I had to stick with the one I had last year”. (P6)

“See, if you've got one pair of trousers and one shirt, what are you meant to wear if it's in the washing?” (P6)

Enforcement policies: There were some variations in reports of enforcement of school dress codes, where it was suggested that some teachers are unhappy about transgressions but somewhat flexible, while others operated strict enforcement with disciplinary measures. Pupils highlighted the tendency for some teachers to openly discuss children's clothing, in corridors, and to challenge them on uniform in front of their peers, causing embarrassment and frustration:

“I think that should be private, especially if it's an issue to do with money” (S4).

In primary schools, children reported losing class points and subsequent rewards. In secondary schools, pupils described receiving punishment exercises, demerits, detentions and being sent home for not wearing the correct uniform:

“Some people get paid monthly and they cannae [cannot] even get new shoes until next month, but they [teachers] expect it the next day and give you detention until you get black shoes” (S4).

Some pupils said that less severe punishments were given for behaviour that affects learning, such as disrupting classes or not doing homework, than for breaching school dress codes.

Cost barriers to learning at school and at home

Findings related to extra costs influencing subject choice and digital exclusion barriers to learning at home.

Subject choice: The main issues raised regarding learning at school were the cost implications of subject choice for secondary school pupils. To study Home Economics, pupils typically paid £15 per year and 50 pence per lesson. One pupil who had wanted to study Home Economics decided against it due to the weekly cost, noting that this *“takes money off my lunch money”*. In one school, choosing Art and Design had implications for costs, despite art supplies being provided free of charge. Several pupils spoke about paint supplies running out and the inferior quality of the paint provided in school, potentially impacting on their assessment marks:

“if you want actual good paint to do something then you need to go and buy it. If you're doing a design unit then [the teacher] will say you need to go and buy nice stuff for it” (S6).

In addition to specific subject costs, secondary school pupils reported additional costs associated with textbooks and specimen papers for new qualifications, while primary school children highlighted the costs of materials for craft homework projects. One pupil spoke about having three craft projects in a row and the consequent costs involved and thought that these projects should be more widely distributed throughout the year.

“... if you had to make something from cardboard, and we did egg competitions. So, you had to pay for the-- you needed eggs. If you wanted to do more it costs more eggs” (P6).

Digital exclusion barriers to learning at home: Additional costs were highlighted for school and home learning resources, such as the requirement to complete homework on a computer, with associated internet access, memory sticks and, in some cases, access to a printer, all of which were expensive or not available at home. This issue arose more prominently for secondary school children.

“What you have to do, you have to buy a memory stick which is like a tenner (£10) just to put your homework on and come into school to try to print it fae [from] a computer at school which they’re just going to moan at you about” (S6).

“Especially if you’ve typed it up on something like Notepad instead of Word [because you don’t have Office at home], it’s not gonnae [going to] look right when it’s [not] on Word” (S6).

All groups were aware of free online access at local public libraries but cited barriers to using them, such as distance from libraries, and the need for parents to accompany children

aged under 12 years when using computers, something which may not be possible with work and other commitments. For those who did not live near a public library, accessing with or without parents, required money for bus fares.

One secondary school group felt that teachers should allow different options, such as written homework, and that setting online homework for people without straightforward internet access was setting them up to fail:

“If they want pupils to kind of do what they've asked. If they're not going to look at other ways of a pupil being able to complete homework, then they can't expect to have it in.... Or [they should] give you more than one way of being able to complete it, maybe one using the internet and one maybe not” (S4).

Other barriers to learning in the home raised by pupils included the effect of lack of space on their ability to concentrate, and family duties such as helping with siblings.

Concerns about free school meals

Differences emerged in the way free school meals (FSM) were perceived by both primary and secondary school children. In general, primary school children displayed no reaction to receipt of (FSM), as they are offered to all P1-3 children in Scotland, since 2015. The school meal receipts were sometimes referred to as “dinner tickets”.

“Me and [another boy] don't have to pay cos we're listed down as tickets cos (because) our mum and dad don't have enough money to give us every day” (P5).

In secondary schools, where FSM entitlement is means-tested and based on family's household income, the main themes raised by pupils were: feeling pressurised to go out at lunchtime if friends were leaving school to buy food in local shops; embarrassment at having to stay in school for a FSM; and, feelings of isolation and being '*left out*' when friends were going out. It was felt that, regardless of whether pupils had money or not, they would go out with their friends in preference to staying alone at school for lunch.

"If your pals are going out at lunch you'll be a loner. It puts you out of the group....and then you're sitting there on your own" (S3-4).

Some pupils thought that the school meal portion sizes were too small and that purchasing food elsewhere represents better value for money and seems manageable to low-income pupils:

"I have to pay for my lunches and it's cheaper to go out to [shop] and get something. You can go outside and get noodles...they're only 60p" (S1) and *"It's only a pound for chips"* (S3-4).

In the school venue for eating meals, referred to as Fuel Zones, pupils can use a 'Q card' or pay with money. The 'Q card' is a system designed partly to avoid potential stigma, where £1.50 is automatically loaded onto the card every day for low-income pupils to pay for their lunch. Several pupils reported not using the 'Q card', as this was perceived as being an indicator that they received FSM, thus ensuring they stood out and were noticed by their peers.

Missing out on school trips, clubs and events

Many pupils referred to the costs involved in school trips and events, both the official cost and additional more hidden costs, feelings of embarrassment and disappointment at missing out if families could not afford it, and the strategies employed to avoid being stigmatised.

In terms of cost, a primary school group, speaking about a local school which provides trips abroad, queried the affordability of this for families:

“I’ve just been thinking though, how do you get to go to Paris, like how do they get all the money, how do they save up for it?... every family has to pay about £150 for their child” (P7).

Schools varied in the types of trips organised, with one school limiting costs and raising funds to subsidise trips to accommodate children who may not have the resources. Another school offered a range of different trips throughout the school year, some of which were free. Children spoke positively about the free trips, such as to a nearby theme park, and the Christmas pantomime. However, the more substantial and costly residential trips were viewed as more desirable:

“You do get wee [little] stuff for free but see the ones that everyone wants to go on, they’re going to be expensive” (S6).

Pupils felt that missing out on costly school trips meant missing out on fun with friends and a chance to experience new things. They also spoke about having to listen to everyone’s excitement prior to the trip and afterwards hearing about all the fun they missed. Groups in the primary school in a more affluent area spoke about feelings of embarrassment and guilt about not being able to afford to go on school trips:

“I’m not angry at my mum because she’s just had a baby and has three kids but it’s pressure for the kids and pressure for the parents because my mum felt guilty that I couldn’t go... Why do we have costly trips then? I mean, I know they’re more fun maybe but it puts people under pressure and it makes people embarrassed and disappointed if they can’t go” (P7).

Most groups referred to the fact that school trips and events involve additional expenditure over and above the stated price. Additional costs included money for buying snacks; souvenirs on school trips or at the Christmas fair; and dress-up or own clothing for special occasions. These presented added financial difficulties for children and families.

“The Christmas fair... it’d be hard for people who don’t have much money because they’d be looking at all these things you couldn’t buy” (P7).

One group spoke about a farm trip which entailed an extra £5 for pony trekking, 50 pence to feed the fish, a packed lunch and £1 for an ice cream. Another reported that all of her birthday and Christmas presents were going towards equipment for a winter ski trip.

Equally, groups spoke about the costs of joining after-school clubs, which are not limited to membership cost, but include other costs, such as equipment, travel costs, and ticket prices if family members wished to attend events. Children discussed strategies to avoid embarrassment or stigma, such as misbehaving in order to pretend to classmates that they had been excluded from the activity, and feigning disinterest in the trip or activity. However, some children also referred to potential emotional impacts on themselves and their families:

“It would make you feel left out, and it would make you need to lie. Like say, I’m not really into violin even though you really could be. And then you’d go home sad and your mum would be stressed out and won’t know what to do” (P7).

Pupils also spoke about a visible dip in school attendance on non-uniform days (where they can wear personal clothing if they pay a small fee towards school funds), and when classmates were away on a trip or at a fun event. In the case of ‘reward’ trips, where participation is predicated on good school attendance records, children from low-income families may still not be able to afford to attend, despite excellent attendance. Several groups indicated a perception of built-in discrimination, and thought that, even if their attendance was good, they would not be rewarded if they could not afford to pay for the trip.

Discussion

This study set out to explore the effects of school practices and education policies on the participation and school experiences of pupils from low-income households. The goal was to highlight how school practices and policies could be designed to reduce or remove stigma, exclusion or disadvantage for pupils, and by doing so, remove barriers to learning. The findings provide experiential and perceptual evidence of the barriers faced by low-income children in their ability to access and participate fully in the school experience. The children identified significant barriers relating to most elements of the school day, from getting dressed in the morning right through to completing homework in the evening. Consistent with the Resource and Investment theory (Mayer, 1997), costs arising from school policies and practices emerged as notable barriers across most of the themes explored. Some key costs evidenced in this study related to transport barriers to holiday revision classes and after

school clubs and activities, additional equipment costs for after-school clubs, school uniform costs, and resources for home learning. Crucially, these findings provide insights into how school-based factors contribute to the link between poverty and educational outcomes.

The personal accounts of difficulties associated with restricted transport support and entitlement, such as the inability to travel and participate in after-school activities that fall outside the entitled free travel times, are consistent with other studies (Wikeley et al, 2007; Tanner et al, 2016; Farthing, 2014). Evidence suggests that these extra-curricular activities benefit pupils from low-income households in terms of additional learning experiences (Massoni, 2011), development of better social, emotional and behavioural skills and better attainment (Tanner et al, 2016; West, 2007). Flexibility is therefore required around free school travel entitlement to enable children from low-income households to participate in out-of-school hours and holiday activities. Additionally, the place-based approach to allocating free travel, introduced in the 1980's, should be revised to incorporate an element of need, for low-income families. Alternate approaches such as the London Zip Oyster card could be explored.

The findings relating to school uniform affordability and enforcement policies in contributing to embarrassment and perceived stigma were highlighted by previous studies (Holloway et al, 2014). Estimates in Scotland suggest that the basic cost of a child's school uniform at the lowest retail price is almost £130. However, at the time this study was carried out, the average school uniform support given by local governments to low-income families in Scotland was £50 with a range from £20 to £110 (Glasgow Centre for Population Health, 2016). This difference between the support provided and actual costs of school uniform is a source of significant financial pressure on low-income families.

Apart from cost, school uniforms appear to impact attainment through discipline-related problems associated with not having the required uniform, resulting in exclusion or absence from school. School uniform and accessories such as school bags, jackets and shoes, were also viewed as key indicators of income, thereby leading to stigma. Pupils reported being singled out, bullied and made to feel embarrassed by other pupils and teachers for not having the 'right' clothing or breaching of school uniform codes. Such actions can have negative impacts on pupils' relationships with their peers (Holloway et al, 2014) and teachers. Uniform breaches can also become more of an issue for poorer rather than more affluent children in terms of the regularity of punishments (Horgan, 2007; Sutton et al, 2007), which has consequences for attainment.

Issues of stigma also extend to school meals, particularly among secondary school pupils, where eligibility for free school meals (FSM) is dependent on receipt of certain welfare benefits. Although the FSM policy was designed to lessen the financial burden on low-income families, not every entitled family applies and not every entitled child uses their FSM ticket (Holloway et al, 2014). In this study, pupils eligible for FSM faced pressure to go out with friends at lunchtime to avoid embarrassment, being singled out and isolated. This stigma associated with claiming FSM has been reported in other studies and has in some cases been linked to bullying (Holloway et al, 2014). Addressing the unintended consequences associated with how FSM are administered should therefore be prioritised by education and school authorities.

A key poverty-related barrier to children's ability to participate fully in education was the finding that money appeared to limit pupil's subject choices, particularly when the subject

requires payment for equipment or learning materials. The subsequent avoidance of cost-bearing subjects has also been found elsewhere (Farthing, 2014; Holloway et al, 2014; Iannelli et al, 2015). Farthing (2014) found that almost one-third of students from low-income families chose not to study arts-based subjects due to the associated costs.

Homework tasks can also require parents to buy extra subject materials, and there was a perception from children that the quality of resources used influences teacher judgement of the quality of school work submitted. This perception, if found to be a reality, raises significant issues about how teachers reinforce inequality in educational experiences. Policies should therefore be introduced to stop curriculum charges for subjects. This would help pupils from low-income households to choose subjects on the basis of interest rather than cost.

Closely linked to the above is the inability of children to complete homework tasks due to a lack of access to home computing facilities. While secondary school pupils are increasingly being set homework requiring online research, evidence suggests that in some of the poorest areas of the Scotland, only 46% of households have a broadband internet connection, compared with 91% in more affluent areas (White, 2013). Those without internet access therefore have to access internet for homework through public and school libraries, as well as community centres. However, this option is becoming restricted due to financial cuts across local authorities leading to library closures and limited opening hours (BBC, 2016; McNab, 2018). Therefore, education authorities need to carefully examine and address the tensions associated with the need to exploit the role of technology to facilitate learning and the likely inequalities that this may raise due to differences in children's socioeconomic backgrounds.

The limits to school participation were particularly evident in discussions around cost barriers to taking part in school trips, fun events and after-school clubs. This study revealed feelings of isolation and embarrassment at not being able to participate in these activities. From an attainment point of view, inability to participate in extra-curricular activities is an impediment to learning experiences, which affects pupils' engagement and learning in school (Hirsch, 2007). For children from low-income families, it also leads to deprivation and reduced opportunities for social experiences with friends (Ridge, 2002; Ridge, 2009; The Children's Society, 2014). Previous studies have indicated that children worry about asking parents for extra amounts of money charged for participating in activities, no matter how small (Horgan, 2007). Children in this study, as in others, had insights into the challenges and demands of poverty on their parents, and moderated their own needs to protect parents by withholding information about school trips or activities with an associated cost (Peters et al, 2009; Ridge, 2002; Ridge, 2009).

Overall, our findings also lend credence to the argument that education is a 'classed' phenomenon, where the curriculum itself, and the way it is structured and implemented is more advantageous to those from high income households (Horgan, 2007). Pupils in this study highlighted the risk of receiving detention and other disciplinary measures when they could not conform to school policies. Thus, education could unknowingly reflect existing inequalities in society, rather than trying to narrow these inequalities. Therefore, policy interventions to address these phenomena need to be considered (Raffo et al, 2007).

Our findings are limited in that only a small number of schools were involved in the study. The location of the study also means that issues highlighted predominantly reflect those associated with urban poverty and we may not have been able to capture distinct

problems relating to semi-rural and rural poverty. Additionally, while macro-level indicators were used to select schools which are in low-income areas, participants were not selected based on their household incomes. It is therefore possible that we missed some nuanced experiences that may be obtained by selecting children from low-income households. Our approach aimed, however, to avoid a situation where selected participants become further stigmatised within the school environment. Finally, this study did not aim to address the different experiences of some children who are likely to suffer multiple disadvantage by virtue of, for example, gender or migrant status. This may be a useful area for future research.

A key strength of the study is its contribution to the understanding of how poverty influences the ability of young children to fully participate in school experiences important for educational attainment. Crucially, it highlights the role of the school in mediating the effects of poverty on attainment, and how some school policies can widen the attainment gap between low-income and better off children.

Policy and practice impacts and implications

In addition to arguments already highlighted above, protecting households from income poverty should be a central part of government efforts to enable all children to participate fully in the experiences offered by the school. This is increasingly important given the current and predicted rise in child poverty levels in the UK (Browne and Hood, 2016; Cooper and Stewart, 2017). Additionally, it is important for all school staff and future teachers to understand how school policies and practices can limit pupils' participation and affect their school experience, and subsequent educational attainment. In-service and pre-service professional development activities focused on these issues will help schools to implement

effective change, not only in removing financial barriers to children's participation, but also in reducing associated stress and stigma (Cooper and Stewart, 2017; Graham et al, 2018).

In Scotland, emerging findings during the Cost of the School Day (CoSD) study influenced policy which committed to action to reduce the costs of school for low income parents (actions 29 and 30; Scottish Government, 2016). This action plan also heralded the introduction of a new Child Poverty Bill (Scottish Parliament, 2017) and an associated delivery plan with targets for reducing child poverty by 2030 (Scottish Government, 2018a).

The findings have also been a key catalyst in changes to school clothing grant awards. Since the discrepancy between the grants and the actual costs of school uniforms was highlighted, the Scottish Government has announced a new national minimum clothing grant payment of £100, that will benefit an estimated 120,000 low-income families (Scottish Government, 2018b). More recently, the local authority in which the study was undertaken further increased the local payment to £110 (Glasgow City Council, 2018), and in 2016, payment of school clothing grants in the local authority was automated, removing the need for families to proactively apply for the grant. As a result of this initiative, 97% of eligible families have received a school clothing grant award.

Conclusion

By privileging children's voices, this study revealed important insights that were consistent with the Resource and Investment theory and the Family Stress theory and contributed towards influencing policy at national and local levels on school clothing grants. Moreover, the children's insights are a continuing reminder of the need to address other barriers to learning, such as transport costs, assumptions around families having internet access, or

sufficient income to allow children to participate in after-school clubs and residential school trips.

With poverty significantly influencing educational outcomes, this study has shown that actively listening to children can increase our understanding of non-pedagogical actions that need to be addressed, if we are to ensure that all children have the opportunity to enjoy growing up, learning and achieving their full potential.

The authors declare that there is no conflict of interest.

The Cost of the School Day (CoSD) project manager post was located at, and administered and delivered by, the Child Poverty Action Group (Scotland), a charity working on behalf of children growing up in poverty. The CoSD project was supported by funding from NHS Greater Glasgow and Clyde, the Glasgow Centre for Population Health and Glasgow City Council Education Service.

References

Basch, C. E. (2011) 'Breakfast and the achievement gap among urban minority youth', *Journal of School Health*, 81(10): 635-640.

Baum, F., MacDougall, C., Smith, D. (2006) 'Participatory action research', *Journal of Epidemiology and Community Health*, 60: 854-857.

BBC (2016) *Libraries lose a quarter of staff as hundreds close*,
<https://www.bbc.co.uk/news/uk-england-35707956>

Benzeval, M. (2014) *How does money influence health?*, York: Joseph Rowntree Foundation,
www.jrf.org.uk/report/how-does-money-influence-health

Berkowitz, R., Moore, H., Astor, R. A., Benbenishty, R. (2017) 'A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement', *Review of Educational Research*, 87(2): 425- 469.

Blanden, J., Gregg, P. (2004) 'Family income and educational attainment: a review of approaches and evidence for Britain', *Oxford Review of Economic Policy*, 20(2): 245-263.

Browne, J., Hood, A. (2016) *Living standards, poverty and inequality in the UK: 2015-16 to 2020-21*, London: Institute for Fiscal Studies, <https://www.ifs.org.uk/publications/8171>

Butterworth, P., Olesen, S. C., Leach, L. S. (2012) 'The role of hardship in the association between socio-economic position and depression', *Australian & New Zealand Journal of Psychiatry*, 46(4): 364-373.

Casas, F. (2011) 'Subjective Social Indicators and Child and Adolescent Well-being', *Child Indicators Research*, 4: 555-575.

Conger, R. D., Conger, K. J., Martin, M. J. (2010) 'Socioeconomic status, family processes and individual development', *Journal of Marriage and Family*, 72: 685-704.

Connelly, R., Sullivan, A., Jerrim, J. (2014) *Primary and secondary education and poverty review August 2014*, London: Centre for Longitudinal Studies; Economic and Social Research Council, <http://www.cls.ioe.ac.uk/library-media/documents/Primary%20and%20secondary%20education%20and%20poverty%20review%20August%202014.pdf>

Cooper, K., Stewart, K. (2013) *Does money affect children's outcomes?*, York: Joseph Rowntree Foundation, <https://www.jrf.org.uk/report/does-money-affect-children%E2%80%99s-outcomes>

Cooper, K., Stewart, K. (2017) *Does money affect children's outcomes? An update*, London: Centre for Analysis of Social Exclusion, London School of Economics, <http://www.edf.org.uk/updated-lse-report-on-how-money-affects-outcomes-for-children/>

Dickerson, A., Popli, G. K. (2016) 'Persistent poverty and children's cognitive development: evidence from the UK Millennium Cohort Study', *Journal of the Royal Statistical Society A*, 179(Part 2): 535-558.

Duncan, G. J., Brooks-Gunn, J. (1997) 'The Effects of Poverty on Children', *The Future of Children*, 7(2): 55-71.

End Child Poverty Coalition (2016) *Child Poverty Map of the UK, 2016*,
<http://www.endchildpoverty.org.uk/poverty-in-your-area-2016/>

Evans, G. W., Schamberg, M. A. (2009) 'Childhood poverty, chronic stress, and adult working memory', *Proceedings of National Academy of Sciences of U S A.*, 106(16): 6545-6549.

Evans, G. W., Kim, P., Ting, A. H., Tesher, H. B., Shannis, D. (2007) 'Cumulative risk, maternal responsiveness and allostatic load among young adolescents', *Developmental Psychology*, 43(2): 341-351.

Farthing, R. (2014) *The costs of going to school, from young people's perspectives*. London: British Youth Council, Child Poverty Action Group, Kids Company, National Union of Teachers,
<http://www.cpag.org.uk/sites/default/files/The%20Costs%20of%20Going%20to%20School%20FINAL.pdf>

Francis, B., Archer, L., Hodgen J, Pepper, D., Taylor, B., Travers M-C. (2017) 'Exploring the relative lack of impact of research on 'ability grouping' in England: a discourse analytic account', *Cambridge Journal of Education*, 47(1): 1-17.

Glasgow Centre for Population Health (2016) *Briefing Paper 49: Learning from the Cost of the School Day project*, Glasgow: GCPH,
http://www.gcph.co.uk/publications/676_bp_49_learning_from_the_cost_of_the_school_day_project

Gibson, S., Hugh-Jones, S. (2012) 'Analysing your data', in C. Sullivan, S. Gibson. and S. Riley (Eds), *Doing your qualitative psychology project*, London: Sage. pp. 127-153.

Glasgow City Council (2018) *School clothing grant increases for new school term*,
<https://www.glasgow.gov.uk/index.aspx?articleid=22976> .

Gottlieb, D. J., Beiser, A. S., O'Connor, G. T. (1995) 'Poverty, race, and medication use are correlates of asthma hospitalization rates', *American College of Chest Physicians*, 108(1): 28-35.

Graham, A., MacDougall, L., Robson, D., Mtika, P. (2019) 'Exploring practicum: student teachers' social capital relations in schools with high numbers of pupils living in poverty', *Oxford Review of Education*, 45(1): 119-135.

Hirsch, D (2007) *Experiences of poverty and educational disadvantage*. York: Joseph Rowntree Foundation, <https://www.jrf.org.uk/report/experiences-poverty-and-educational-disadvantage>

Holloway, E., Mahony, S., Royston, S., Mueller, D. (2014) *Through Young Eyes. The Children's Commission on Poverty; At what cost? Exposing the impact of poverty on school life 2014*. The Children's Society, <https://www.childrenssociety.org.uk/what-we-do/resources-and-publications/publications-library/at-what-cost-exposing-the-impact-of-poverty-on-school-life-full-report>

Horgan, G. (2007) *The impact of poverty on young children's experience of school*. York: Joseph Rowntree Foundation, <https://www.jrf.org.uk/report/impact-poverty-young-childrens-experience-school>

Iannelli, C., Smyth, E., Klein, M. (2015) 'Curriculum differentiation and social inequality in higher education entry in Scotland and Ireland', *British Educational Research Journal*, 42(4): 561-581.

Jagosh, J., Macaulay, A.C., Pluye, P., Salsberg, J., Bush, P.L., Henderson, J., Sirett, E., Wong, G., Cargo, M., Herbert, C.P., Seifer, S.D., Green, L.W., Greenhalgh, T. (2012) 'Uncovering the Benefits of Participatory Research: Implications of a Realist Review for Health Research and Practice', *Milbank Quarterly*, 90(2): 311-346.

Jensen, E. (2013) 'How Poverty Affects Classroom Engagement', *Educational Leadership*, 70(8): 24-30.

Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd, E., Patsios, D. (2007) *The Multi-dimensional analysis of social exclusion*, London: UCL Institute of Education,
<http://dera.ioe.ac.uk/id/eprint/6853>

Main, G., Mahony, S. (2018) *Fair Shares and Families: Rhetoric and reality in the lives of children and families in poverty*, The Children's Society and University of Leeds,
<https://www.childrenssociety.org.uk/sites/default/files/fair-shares-and-families-full-report.pdf>

Massoni, E. (2011) *Positive effects of extracurricular activities on students*, *ESSAI9* (27),
<http://dc.cod.edu/essai/vol9/iss1/27>

Mayer, S. E. (1997) *What money can't buy: family income and children's life chances*, Cambridge, MA: Harvard University Press.

Mortimore, P., Whitty, G. (2000) *Can school improvement overcome the effects of disadvantage? Perspectives on Education Policy*, London: Institute of Education.

McGillicuddy, D., Devine, D. (2018) ““Turned off” or “ready to fly” – Ability grouping as an act of symbolic violence in primary school’, *Teaching and Teacher Education*, 70: 88-99.

McNab, S. (2018) *Scottish library closures soar as council cuts bite*, The Scotsman,
<https://www.scotsman.com/news/politics/scottish-library-closures-soar-as-council-cuts-bite-1-4756903>

NHS Health Scotland (2018) *Child Poverty in Scotland: Health impact and health inequalities*, Edinburgh: NHS Health Scotland,
<http://www.healthscotland.scot/media/2186/child-poverty-impact-inequalities-2018.pdf>

Organisation for Economic Co-operation and Development (OECD) (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*. Paris: PISA, OECD Publishing,
<https://www.oecd.org/education/pisa-2015-results-volume-i-9789264266490-en.htm>

Peters, M., Carpenter, H., Edwards, G., Coleman, N. (2009) *Costs of schooling 2007*, Nottingham: UK. BMRB/, Department for children, schools and families, Research Report DCSF-RR060, <https://dera.ioe.ac.uk/11335/1/DCSF-RR060.pdf>

Poverty Leadership Panel (nd), <https://www.povertyleadershippanel.org.uk/node/85>

Raffo, C., Dyson, A., Gunter, H., Hall, D., Jones, L., Kalambouka, A. (2007) *Education and poverty: A critical review of theory, policy and practice*, York: Joseph Rowntree Foundation,
<https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/2028-education-poverty-theory.pdf>

Reading, R. (1997) 'Poverty and the health of children and adolescents', *Archives of Disease in Childhood*, 76: 463-467.

Reay, D. (2006) 'The Zombie Stalking English Schools: Social Class and Educational Inequality', *British Journal of Educational Studies*, 54(3): 288-307.

Ridge, T. (2002) *Childhood poverty and social exclusion: From a child's perspective*, Bristol: Policy Press, <https://www.jstor.org/stable/j.ctt1t8986p>

Ridge, T. (2009) *Living with poverty: a review of the literature on children's and families' experiences of poverty*, Department for Work and Pensions, Department for Work and Pensions Research Report; No 594, <http://dera.ioe.ac.uk/11015/>

Risley, T. R., Hart, B. (2006) 'Promoting early language development', in N. F. Watt, C. Ayoub, R. H. Bradley, J. E. Puma, and W. A. LeBoeuf (eds.), *Child psychology and mental health. The crisis in youth mental health: Critical issues and effective programs, Vol. 4. Early intervention programs and policies*, Westport, CT, US: Praeger Publishers/Greenwood Publishing Group. pp. 83-88.

Royal College of Paediatrics and Child Health (2017) *Poverty and child health: views from the frontline*, <https://www.rcpch.ac.uk/sites/default/files/2018-04/poverty20and20child20health20survey20-20views20from20the20frontline20-20final2008.05.20171.pdf>

Scottish Government (2014) *The Scottish Survey for literacy and numeracy 2014*, <https://www2.gov.scot/Topics/Statistics/Browse/School-Education/SSLN>

Scottish Government (2015a) *What do we know about in-work poverty? A summary of the evidence*, <http://www.gov.scot/Publications/2015/01/3233>

Scottish Government (2015b) *High Level Summary of Statistics Trend Last update June 2016, School Leaver Attainment by SIMD*, <http://www.gov.scot/Topics/Statistics/Browse/School-Education/TrendTariffScores>

Scottish Government (2016) *Fairer Scotland Action Plan*,

<https://www.gov.scot/publications/fairer-scotland-action-plan/>

Scottish Government (2017a) *Poverty and Income Inequality in Scotland: 2015/16*,

<https://www.gov.scot/publications/poverty-income-inequality-scotland-2015-16/pages/4/>

Scottish Government (2017b) *Free School Meals*,

<http://www.gov.scot/Topics/Education/Schools/HLivi/schoolmeals/FreeSchoolMeals>

Scottish Government (2017c) *National Improvement Framework and Improvement Plan for Scottish Education – achieving excellence and equity*,

<https://www.gov.scot/publications/2019-national-improvement-framework-improvement-plan/>

Scottish Government (2018a) *Every child, every chance: tackling child poverty delivery plan 2018-2022*, <https://www.gov.scot/publications/child-chance-tackling-child-poverty-delivery-plan-2018-22/>

Scottish Government (2018b) *New national school clothing grant (Thousands to benefit from minimum £100 grant)*,

<https://news.gov.scot/news/new-national-school-clothing-grant>

Scottish Parliament (2017) *Child Poverty (Scotland) Bill*,

[https://www.parliament.scot/S5_Bills/Child%20Poverty%20\(Scotland\)%20Bill/SPBill06S052017.pdf](https://www.parliament.scot/S5_Bills/Child%20Poverty%20(Scotland)%20Bill/SPBill06S052017.pdf)

Sosu, E., Ellis, R. (2014) *Closing the attainment gap in Scottish education*, York: Joseph

Rowntree Foundation, <https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/education-attainment-scotland-full.pdf>

Sosu, E. M., Schmidt, P. (2017) 'Economic Deprivation and Its Effects on Childhood

Conduct Problems: The Mediating Role of Family Stress and Investment Factors', *Frontiers in Psychology*, 8:1580, <https://doi.org/10.3389/fpsyg.2017.01580>

Spencer, S. (2015) *Cost of the School Day report (2015)*, Glasgow: Child Poverty Action

Group, [http://www.cpag.org.uk/sites/default/files/CPAG-Scot-Cost-Of-School-Day-Report\(Oct15\)_0.pdf](http://www.cpag.org.uk/sites/default/files/CPAG-Scot-Cost-Of-School-Day-Report(Oct15)_0.pdf)

Sutton, L., Smith, N., Deardon, C., Middleton, S. (2007) *A child's-eye view of social*

difference, York: Joseph Rowntree Foundation, <https://www.jrf.org.uk/report/childs-eye-view-social-difference>

Taki, Y., Hashizume, H., Sassa, Y., Takeuchi, H., Asano, M., Asano, K., et al. (2010)

'Breakfast staple types affect brain grey matter volume and cognitive function in healthy children', *PLoS One*, 5(12): e15213.

Tanner, E., Chanfreau, J., Callanan, M., Laing, K., Paylor, J., Skipp, A., Todd, L. (2016) *Can out of school activities close the education gap?* Briefing paper 4. London: NatCen Social Research, 2016, Out of school activities & the education gap 4, https://eprint.ncl.ac.uk/file_store/production/232457/E00032E1-A958-4A93-8B61-80E21D906A83.pdf

The Children's Society (2014) *At What Cost: Exposing the impact of poverty on school life - full report*, <https://www.childrenssociety.org.uk/what-we-do/resources-and-publications/publications-library/at-what-cost-exposing-the-impact-of-poverty-on-school-life-full-report>

University of Manchester (nd) *Participatory Research*, <https://www.methods.manchester.ac.uk/themes/qualitative-methods/participatory-research/>

White, D. (2013) *Across the divide: tackling digital exclusion in Glasgow*, Carnegie Trust, <https://www.carnegieuktrust.org.uk/publications/across-the-divide-full-report/>

Wikeley, F., Bullock, K., Muschamp, Y., Ridge, T. (2007) *Educational relationships outside School: Why access is important*, York: Joseph Rowntree Foundation, http://www.docs.hss.ed.ac.uk/education/outdoored/educational_relationships.pdf

West, A. (2007) 'Poverty and educational achievement: why do children from low-income families tend to do less well at school?' *Benefits: The Journal of Poverty and Social Justice*, 15(3): 283-297.
